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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/681,448

04/07/2001

Eric Schneider

4744

24226

7590

05/11/2005

ERIC SCHNEIDER

13944 CEDAR ROAD

#258

UNIVERSITY HEIGHTS, OH 44118

EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/681,448	Applicant(s) SCHNEIDER, ERIC	
	Examiner Igor Borissov	Art Unit 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/11/2005 has been entered.

Response to Amendment

Amendment received on 1/11/2005 is acknowledged and entered. Claims 21-22 have been canceled. Claims 1, 7-10, 23 and 24 have been amended. New claims 26 and 27 have been added. Claims 1-20 and 23-27 are currently pending in the application.

Examiner's note

Examiner disagrees with applicant's statement that the current patent application benefits from US patent application Ser. No. 09/440,606, because the inventive features claimed in the current application are not supported in application Ser. No. 09/440,606. Therefore, the effective date of the current application is 3/22/1999.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15, 17-20 and 23-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-

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statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in

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State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Contrary to the claims in the above-cited cases, in the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of technology. As per Claims 1-15, 17-20 and 26 the method claims are no more than a suggested idea of advising a customer that at least one additional phone number is available for subscription. The claims are completely devoid of any means to carry out a process implementing the step of: *"generating at least one second phone number that is mnemonically related to a first phone number; determining that at least one second phone number is available for subscription; and, said provider initiating communication to the subscriber regarding the availability of said at least one available second phone number."*

In accordance with MPEP 2106 (IV)(B)(2)(b) "Statutory Process Claims", not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)). The claims in the present application do not appear to satisfy either of the two conditions listed above. First, the claims do not include limitations that would suggest a computer is being used to transform the data from one form to another that would place the invention in the technological arts. Second, disregarding the fact that there is no computer claimed that would physically

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transform the data, there does not appear to be any physical transformation of data. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As per Claims 23-25, the recited method steps of: *"determining that said phone number is one of a changed phone number and disconnected phone number; and, communicating with said calling party to determine whether said calling party may be interested in subscribing to at least one of a said phone number and any available phone number mnemonically related to said phone number"* does not required any technology to be implemented. As per: *"receiving dialed digits from a calling party corresponding to a phone number; and attempting to place a phone call connection from said calling party through the network to said phone number"*, said method steps could be understood as merely using a telephone to make a phone call, which constitutes a trivial or incidental use of technology. However, the claimed invention must utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (*Bd. Pat. App. & Inter.* 2001)). Although Bowman is not precedential, it has been cited for its analysis.

As per Claim 27, the Claim merely recites a *"computer program product"*, and there is no indication in the Claim that a computer has to be used for executing said method. Examiner recommends the following language for the Claim 27 in order to obviate the 35 USC § 101 issue: "A computer-readable medium containing program instructions for execution by a computer, which, when executed by the computer cause the computer to implement a method for..., comprising:".

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) a network system, or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims are not

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permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilles (US 6,137,873) in view of Trell (US 6,393,117).

Gilles teaches a computer-implemented method for processing orders for telecommunication services, comprising:

Independent Claims

Claims 1, 24, 26 and 27. Given a preferred (by a customer) telephone number pattern, matching the available numbers to the requested pattern and returning to a customer over a network a list of available numbers that match the desired telephone number pattern (C. 11, L. 48-51). Examiner understands *returning to a customer a list of available numbers that match the desired telephone number pattern* as returning to a customer numbers, which are similar to the desired ones and easy to remember, thereby disclosing "mnemonic" feature. Furthermore, Gilles teaches, that various steps disclosed are not necessarily sequential, and that the Gilles invention is independent of the sequence in which the steps are completed (C. 6, L. 1-9). However, Gilles does not explicitly teach that the provider initiates communication regarding said numbers.

Trell teaches a telephoning method and system, wherein a subscriber is offered an additional telephone number from a list of available, unused telephone numbers, and

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wherein said *offering* step is initiated by a service provider over the network (column 1, lines 49-50; Claim 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gilles to include that said *offering* step for an additional telephone number is initiated by the service provider, as disclosed in Trell, because it would provide large economical advantage to telephone companies since unused telephone numbers become used and cause an increase call frequency, as specifically stated in Trell (C. 5, L. 45-49).

Dependent Claims

Claim 2. See reasoning applied to Claim 1.

Claim 3. Gilles teaches said computer-implemented method, thereby indicating the *automation* feature.

Claims 4-6. See reasoning applied to Claim 1.

Claims 7-10. Gilles teaches, that based upon provided by a customer a preferred telephone number pattern, matching the available numbers to the requested pattern and returning to a customer over a network a list of available numbers that match the desired telephone number pattern (C. 11, L. 48-51). Examiner understands *returning to a customer a list of available numbers that match the desired telephone number pattern* as returning to a customer numbers, which are similar to the desired ones and easy to remember, thereby disclosing "mnemonic" feature.

Claim 11-13. See reasoning applied to Claim 1.

Claim 14. Gilles teaches said computer-implemented method, wherein said calling party is a service provider (C. 3, L. 28-30).

Claim 15. See reasoning applied to Claim 1.

Claim 16. Trell teaches: receiving dialed digits identifying a selected preferences (C. 2, L. 50-57).

Claim 17. Trell teaches: receiving speech from said calling party by operator (C. 5, L. 58-59).

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Claims 18-19. Trell teaches said method, wherein the subscriber initiates additional phone number request before said additional phone number is determined (C. 2, L. 50-63).

Claim 20. See reasoning applied to Claim 1.

Claim 25. See reasoning applied to Claim 1.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quatse et al. (US 5,991,368) in view of Gilles.

Independent Claims

Claim 23. Quatse et al. (Quatse) teaches customer information announcement method, comprising: maintaining a database (list) of customers (C. 1, L. 51-52); receiving dialed digits from a calling party corresponding to a phone number (C. 3, L. 10-12); attempting to place a phone call connection from said calling party through the network to said phone number (C. 3, L. 13-16); determining that said phone number is one of a changed phone number (C. 3, L. 32-33); communicating with said calling party to offer additional information related to the telephone number entered (C. 5, L. 10-12).

Quatse does not specifically teach that said additional information includes communicating with said calling party to determine whether said party is interested in subscribing phone numbers mnemonically related to said dialed phone number.

Gilles teaches: based upon provided by a customer a preferred telephone number pattern, matching the available numbers to the requested pattern and returning to a customer over a network a list of available numbers that match the desired telephone number pattern (C. 11, L. 48-51). The examiner understands *returning to a customer a list of available numbers that match the desired telephone number pattern* as returning to a customer numbers, which are similar to the desired ones and easy to remember, thereby disclosing "mnemonic" feature. Furthermore, the examiner understands *returning the available phone numbers in response to requested phone number* as communicating with a customer to determine whether the customer is interested in subscribing said available phone numbers matching to the requested one.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Quatse to include communicating with said calling party to determine whether said party is interested in subscribing available phone numbers mnemonically related to the requested phone number, as disclosed in Gilles, because it would provide large economical advantage to telephone companies since unused telephone numbers become used and cause increase in revenue.

Response to Arguments

Applicant's arguments with respect to Claims 1-20 and 23-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (571) 272-6801.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (571) 272-6812.

Any response to this action should be mailed to:

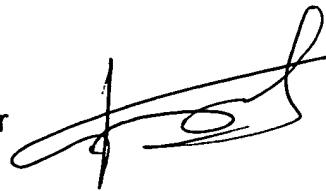
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or faxed to:

(703) 872-9306

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communications labeled "Box AF"]

Igor Borissov
Patent Examiner
Art Unit 3639



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4/29/2005